SCORE Search Results Details for Application 10552515 and Search Result 20080624 [135827] us-10-552-515-L. copy [157] 933 rag

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This page gives you Search Results detail for the Application 10552515 and Search Result 20080624_135827_us-10-552-515-1_copy_157_933.rag.

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OM protein - protein search, using sw model

Run on: June 24, 2008, 15:17:27; Search time 267 Seconds

(without alignments)

1751.538 Million cell updates/sec

Title: US-10-552-515-1_COPY_157_933

Perfect score: 4123

Sequence: 1 QQDVQDGNTTVHYALLSASW.....SELSSHWTPFTVPKASQLQQ 777

Scoring table: BLOSUM62

Gapop 10.0, Gapext 0.5

Searched: 3405708 segs, 601879884 residues

Total number of hits satisfying chosen parameters: 3405708

Minimum DB seg length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database: A_Geneseq_200711:*

1: geneseqp1980s:*

2: geneseap1990s:*

3: geneseqp2000:*

4: geneseqp2001:*

5: geneseap2002:*

6: geneseqp2003a:*

7: geneseqp2003b:*

8: geneseqp2004a:*
9: geneseqp2004b:*
10: geneseqp2005:*
11: geneseqp2006:*
12: geneseqp2007:*

양

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result		Query				
No.	Score	Match	Length	DB	ID	Description
1	4123	100.0	933	 8	 ADT77664	Adt77664 Splice va
2	4123	100.0	933	11	AEL84788	Ael84788 Tumor mar
3	3739	90.7	885	10	AEB13426	Aeb13426 Human pro
4	3572	86.6	843	10	AEB13424	Aeb13424 Human pro
5	3031.5	73.5	898	4	ABG15488	Abg15488 Novel hum
6	1502.5	36.4	920	6	ADB64420	Adb64420 Human pro
7	1482.5	36.0	920	6	ABP58666	Abp58666 Human dih
8	1467.5	35.6	981	8	ADK52114	Adk52114 Human ato
9	1467.5	35.6	981	12	AEN06206	Aen06206 Human eso
10	1461.5	35.4	840	11	AEG11146	Aeg11146 Human tra
11	1456.5	35.3	960	11	AEG11142	Aeg11142 Human tra
12	1452.5	35.2	1017	12	AFB77190	Afb77190 Mouse TM-
13	1437	34.9	1003	7	ADG48280	Adg48280 Human ret
14	1412.5	34.3	913	11	AEH82071	Aeh82071 Human gna
15	1378.5	33.4	1219	4	ABB62812	Abb62812 Drosophil
16	1378.5	33.4	1219	10	AFB95185	Afb95185 Fruit fly
17	1369	33.2	910	6	ADC42854	Adc42854 REMAP pro
18	1369	33.2	910	11	AEL84658	Ael84658 Tumor mar
19	1367.5	33.2	712	11	AEG11145	Aeg11145 Human tra
20	1344	32.6	1075	4	ABB65993	Abb65993 Drosophil
21	1344	32.6	1075	10	AFC04729	Afc04729 Fruit fly
22	1159.5	28.1	1058	4	ABB65022	Abb65022 Drosophil
23	1159.5	28.1	1058	10	AFC01816	Afc01816 Fruit fly
24	1154	28.0	596	6	ADB64387	Adb64387 Human pro
25	1061.5	25.7	594	4	AAB92637	Aab92637 Human pro
26	1061.5	25.7	594	5	ABP43811	Abp43811 FLJ10261
27	1061.5	25.7	594	8	ADJ75429	Adj75429 Marker ge
28	1061.5	25.7	594	8	ADN04848	Adn04848 Antipsori
29	1061.5	25.7	594	11	AEG11143	Aeg11143 Human FLJ
30	1024.5	24.8	782	6	ADX42387	Adx42387 Human col
31	1024.5	24.8	782	7	ADT95905	Adt95905 Colon can
32	1024.5	24.8	782	8	ADQ96288	Adq96288 T cell ac
33	1024.5	24.8	782	8	ADQ96104	Adq96104 T cell ac
34	912.5	22.1	475	6	ADB64962	Adb64962 Human pro

RESULT 1 ADT77664

35	873.5	21.2	642	7	ADM05798	Adm05798 Human pro
36	873.5	21.2	642	10	AEC88728	Aec88728 Human cDN
37	873.5	21.2	642	11	AEG11144	Aeg11144 Human FLJ
38	819.5	19.9	443	5	ABP41785	Abp41785 Human ova
39	784.5	19.0	390	5	ABB90382	Abb90382 Human pol
40	735	17.8	139	5	AAE24066	Aae24066 Human pro
41	722.5	17.5	360	4	AAM40391	Aam40391 Human pol
42	711.5	17.3	346	8	ADP29628	Adp29628 Human sec
43	695.5	16.9	608	8	ADQ96298	Adq96298 T cell ac
44	695.5	16.9	608	8	ADQ96286	Adq96286 T cell ac
45	684.5	16.6	483	7	ADM05305	Adm05305 Human pro

ALIGNMENTS

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     ADT77664;
XX
DT
     15-JUN-2007
                  (revised)
DT
     13-JAN-2005
                  (first entry)
XX
     Splice variant-novel gene expressed in prostate (SV-NGEP) polypeptide.
DE
XX
     Splice variant-novel gene expressed in prostate; SV-NGEP; human;
KW
     prostate cancer; cytostatic; gene therapy; immunotherapy; BOND_PC;
ΚW
     NGEP long variant; NGEP long variant [Homo sapiens]; GO5886.
KW
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OS
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                     /note= "An immunogenic fragment comprising 8 consecutive
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                     amino acids that specifically binds to an antibody that
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FT
                     acids 157-933 is referred to in Claim 1"
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     28-OCT-2004.
XX
     05-APR-2004; 2004WO-US010588.
PF
XX
PR
     08-APR-2003; 2003US-0461399P.
XX
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(USSH ) US DEPT HEALTH & HUMAN SERVICES.
PA
XX
PΙ
     Pastan I, Bera TK, Lee B;
XX
    WPI; 2004-758338/74.
DR
    N-PSDB; ADT77665.
DR
DR
     PC:NCBI; gi48093524.
XX
PΤ
     New Splice Variant-Novel Gene Expressed in Prostate polypeptide or
PT
     encoding nucleic acid molecule for diagnosing, preventing or treating
PT
     cancer, especially prostate cancer.
XX
PS
     Claim 1; SEQ ID NO 1; 88pp; English.
XX
     The present sequence is the protein sequence of splice variant-novel gene
CC
     expressed in prostate (SV-NGEP). SV-NGEP is identical to NGEP from amino
CC
CC
     acid 1-157, diverging from amino acid 158. Expression analysis in 76
     normal and foetal tissues showed SV-NGEP to be strongly expressed only in
CC
CC
     a prostate sample. Claimed methods for detecting prostate cancer in a
CC
     subject comprise: contacting the sample with an antibody that
CC
     specifically binds a SV-NGEP polypeptide and detecting the formation of
CC
     an immune complex; or detecting an increase in expression of SV-NGEP
CC
     polypeptide or mRNA. Antibodies to an SV-NGEP polypeptide can be used to
CC
     detect metastatic prostate cancer cells at locations other than the
     prostate. A claimed method for producing an immune response against a
CC
     cell expressing SV-NGEP, for example in a subject with prostate cancer,
CC
CC
     comprises administering the polypeptide, or a polynucleotide encoding it,
CC
     to produce an immune response that decreases growth of the prostate
CC
     cancer. A claimed method for inhibiting the growth of a malignant cell
     that expresses SV-NGEP comprises culturing cytotoxic T lymphocytes (CTLs)
CC
     with SV-NGEP to produce activated CTLs that recognise an NGEP expressing
CC
CC
     cell, and contacting the malignant cell with the activated CTLs.
CC
     Alternatively, growth of a malignant cell is inhibited by contact with an
     antibody that specifically binds an SV-NGEP polypeptide, where the
CC
CC
     antibody is linked to an effector molecule (chemotherapeutic agent or
CC
     toxin) that inhibits growth of the malignant cell. This may be performed
CC
     in vivo. Kits for detecting an SV-NGEP polypeptide or polynucleotide in a
CC
     sample are also claimed.
CC
CC
     Revised record issued on 15-JUN-2007: Enhanced with precomputed
CC
     information from BOND.
XX
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                                                                             0;
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QУ

721 ESVEIKVKREYYLAKQALAENEVLFGTNGTKDEQPKGSELSSHWTPFTVPKASQLQQ 777

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Db
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XX
DT
     18-OCT-2007 (revised)
DT
     15-JUN-2007 (revised)
     28-DEC-2006
DT
                  (first entry)
XX
     Tumor marker gene NGEP SEQ ID NO 155.
\mathsf{DE}
XX
     cytostatic; diagnosis; prognosis; tumor marker; gene expression;
KW
     drug screening; cancer; neoplasm; NGEP; BOND_PC; NGEP long variant;
KW
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KW
XX
OS
     Homo sapiens.
XX
PN
     WO2006110593-A2.
XX
PD
     19-OCT-2006.
XX
PF
     07-APR-2006; 2006WO-US013172.
XX
     07-APR-2005; 2005US-0669342P.
PR
PR
     11-OCT-2005; 2005US-0725982P.
XX
PA
     (MACR-) MACROGENICS INC.
XX
PΙ
     Von Haller PD, Schummer M, Meyer DW, Schubert LA, Tjoelker LW;
XX
     WPI; 2006-814687/82.
DR
     N-PSDB; AEL84787.
DR
DR
     REFSEQ; NP_001001891.
DR
     PC:NCBI; gi48093524.
XX
     Detecting or diagnosing cancer in a subject comprises determining
PΤ
     expression of at least one gene, and comparing level of expression to a
PT
     control sample from a normal subject, where increased expression level
PT
PΤ
     indicates cancer.
XX
PS
     Claim 8; SEQ ID NO 155; 583pp; English.
XX
CC
     The invention describes a method of detecting or diagnosing cancer in a
CC
     subject comprising determining the expression level of at least one gene,
CC
     and comparing the level of expression to a corresponding control sample
```

```
from a normal subject, where cancer is detected or diagnosed if there is
CC
     an increase in the expression level of the gene relative to the
CC
     expression in the control sample. Also described are: identifying a
CC
CC
     compound to be tested for its ability to prevent, treat, manage, or
CC
     ameliorate cancer or its symptom; a compound identified by the method;
     treating cancer in a patient; treating a cancer in a subject that is
CC
CC
     fully or partially refractory to a first treatment in a patient; and a
CC
     pharmaceutical composition comprising an amount of an antibody selected
CC
     from anti-SLC12A2, anti-FLJ23375, anti-GRM5, anti-TAS2R1, anti-NRXN2,
     anti-C14orf160, anti-MGC 15668, anti-MGC33486, anti-TMEM16F, anti-FAT,
CC
     anti-KIAA0195, anti-LRFN, anti-NFASC, anti-BAT2D1, anti-MGC2963, anti-
CC
     KIAA0685, anti-EDG3, anti-GGTL3, anti-PLVAP, anti-FLJ31528, anti-
CC
     FLJ90709, anti-VEZATIN, anti-TMPRSS9, anti-ATP13A5, anti-PKHD1L1, anti-
CC
     C2orf18, anti-ANKRD22, anti-FAM62B, anti-LOC57168, anti-CDKAL1, anti-
CC
     SLC39A3v1, anti-SLC39A3v2, anti-BAT5, anti-TM9SF4, anti-DC2, anti-VAPB,
CC
     anti-XTP3TPB, anti-TACSTD2, anti-FNDC3A, anti-GK001, anti-OCIAD2, anti-
CC
     PR01855, anti-C20orf3, anti-SDFR1, anti-FLJ20481, anti-LENG4, anti-
CC
CC
     FLJ12443, anti-ARP5 Long, anti-ARP5 Short, anti-TMD0645, anti-NGEP, anti-
CC
     IL1RAP1, anti-PLXNB1, anti-ATP2B2, anti~FLJ11848, anti-ENTPD2, anti-
CC
     PPM1H, anti-KRTKAP3, anti-KCNC3, anti-TM9SF1, anti-ULBP1, anti-C19orf26,
CC
     anti-KIAA830, anti-KIAA1244, anti-KIAA1797, anti-MGC26856, anti-NETO2,
CC
     anti-SUSD2, anti-FOLR2, anti-EMR2, ENTPD1, anti-ATP10B, anti-PTK7, anti-
CC
     FLJ14681, anti-C20orf22, anti-FLJ14281, anti-FAM8A1, anti-TMED7, anti-
     C20orf108, anti-ATAD1, anti-GPR154, anti-C14orf27, anti-OSAP, anti-
CC
     FAD104, anti-FLJ90492, anti-SLC27A3, anti-RON, anti-ATP13A1, anti-
CC
     DKFZP564D166, anti-ESSPL, anti-EXTL3, anti-KAI1, anti-KIAA0960, anti-
CC
CC
     MTRNL, anti-SLC27A1, anti-GRIA, anti-OR4M1, anti-KIAA1679, or anti-UPK-1b
CC
     antibody, and a pharmaceutical carrier. The methods are useful for
CC
     detecting, diagnosing, and treating cancer, e.g. colon, lung, ovary,
     prostate, pancreas, or bladder cancer. This is the amino acid sequence of
CC
     NGEP, altered levels of expression are useful in the diagnosis or
CC
CC
     prognosis of cancer.
CC
     Revised record issued on 18-OCT-2007: Enhanced with precomputed
CC
CC
     information from BOND.
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     Sequence 933 AA;
 Query Match
                          100.0%; Score 4123; DB 11; Length 933;
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Qу
          217 LEVVPDVPPEYYSCRFRVNKLPRFLGSDNQDTFFTSTKRHQILFEILAKTPYGHEKKNLL 276
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Qy	181	RYFGEKVALYFAWLGFYTGWLLPAAVVGTLVFLVGCFLVFSDIPTQELCGSKDSFEMCPL	240
Db	337	RYFGEKVALYFAWLGFYTGWLLPAAVVGTLVFLVGCFLVFSDIPTQELCGSKDSFEMCPL	396
Qy	241	CLDCPFWLLSSACALAQAGRLFDHGGTVFFSLFMALWAVLLLEYWKRKSATLAYRWDCSD	300
Db	397	CLDCPFWLLSSACALAQAGRLFDHGGTVFFSLFMALWAVLLLEYWKRKSATLAYRWDCSD	456
Qy	301	YEDTEERPRPQFAASAPMTAPNPITGEDEPYFPERSRARRMLAGSVVIVVMVAVVVMCLV	360
Db	457	YEDTEERPRPQFAASAPMTAPNPITGEDEPYFPERSRARRMLAGSVVIVVMVAVVVMCLV	516
Qy	361	SIILYRAIMAIVVSRSGNTLLAAWASRIASLTGSVVNLVFILILSKIYVSLAHVLTRWEM	420
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Qy	421	HRTQTKFEDAFTLKVFIFQFVNFYSSPVYIAFFKGRFVGYPGNYHTLFGVRNEECAAGGC	480
Db	577	HRTQTKFEDAFTLKVFIFQFVNFYSSPVYIAFFKGRFVGYPGNYHTLFGVRNEECAAGGC	636
Qу	481	LIELAQELLVIMVGKQVINNMQEVLIPKLKGWWQKFRLRSKKRKAGASAGASQGPWEDDY	540
Db	637	LIELAQELLVIMVGKQVINNMQEVLIPKLKGWWQKFRLRSKKRKAGASAGASQGPWEDDY	696
Qy	541	ELVPCEGLFDEYLEMVLQFGFVTIFVAACPLAPLFALLNNWVEIRLDARKFVCEYRRPVA	600
Db	697	ELVPCEGLFDEYLEMVLQFGFVTIFVAACPLAPLFALLNNWVEIRLDARKFVCEYRRPVA	756
Qy	601	ERAQDIGIWFHILAGLTHLAVISNAFLLAFSSDFLPRAYYRWTRAHDLRGFLNFTLARAP	660
Db	757	ERAQDIGIWFHILAGLTHLAVISNAFLLAFSSDFLPRAYYRWTRAHDLRGFLNFTLARAP	816
Qy	661	SSFAAAHNRTCRYRAFRDDDGHYSQTYWNLLAIRLAFVIVFEHVVFSVGRLLDLLVPDIP	720
Db	817	SSFAAAHNRTCRYRAFRDDDGHYSQTYWNLLAIRLAFVIVFEHVVFSVGRLLDLLVPDIP	876
Qy	721	ESVEIKVKREYYLAKQALAENEVLFGTNGTKDEQPKGSELSSHWTPFTVPKASQLQQ 77	7
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RESULT 3 AEB13426

ID AEB13426 standard; protein; 885 AA.

XX

CC

CC

CC

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AC
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XX
     22-SEP-2005 (first entry)
DT
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DE
     Human prostate specific polypeptide #2.
XX
     Screening; diagnosis; drug delivery; prostate specific polypeptide;
KW
     cancer; prostate tumor; cytostatic; neoplasm.
KW
XX
OS
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XX
PN
     WO2005062788-A2.
XX
     14-JUL-2005.
PD
XX
PF
     16-DEC-2004; 2004WO-US042406.
XX
PR
     22-DEC-2003; 2003US-0531809P.
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     (AVAL-) AVALON PHARM INC.
XX
PΙ
     Weigle B, Ebner R;
XX
DR
     WPI: 2005-497793/50.
     N-PSDB; AEB13425.
DR
XX
PΤ
     Novel isolated prostate specific polypeptide, useful for treating cancer,
PT
     and identifying agent that modulates activity of cancer related gene.
XX
PS
     Claim 12; SEQ ID NO 5; 59pp; English.
XX
CC
     The invention relates to an isolated prostate specific polypeptide
     comprising one or more immunogenic fragments. The invention also relates
CC
CC
     to a method of identifying an agent that modulates the activity of a
CC
     cancer related gene involving contacting a compound with a cell
CC
     containing a gene under conditions promoting the expression of the gene,
CC
     detecting a difference in expression of the gene relative to when the
     compound is not present and identifying an agent that modulates the
CC
CC
     activity of a cancer related gene, a method of identifying an anti-
CC
     neoplastic agent involving contacting a cell exhibiting neoplastic
CC
     activity with a compound first identified as a cancer related gene
CC
     modulator using and determining a decrease in neoplastic activity after
     contacting, when compared to when the contacting does not occur, or
CC
     administering an agent first identified to an animal exhibiting a cancer
CC
CC
     condition and detecting a decrease in cancerous condition, a method of
```

determining the cancerous status of a cell involving determining an

increase in the level of expression in a cell of a gene where an elevated

expression relative to a known non-cancerous cell indicates a cancerous

CCstate or potentially cancerous state, an antibody that reacts with a CC prostate specific polypeptide, an immunoconjugate comprising the antibody and a cytotoxic agent, a method of treating cancer involving contacting a CC CC cancerous cell in vivo with an agent having activity against a prostate CCspecific polypeptide and an immunogenic composition the prostate specific polypeptide. The prostate specific polypeptide is useful for identifying CC CC an agent that modulates the activity of a cancer related gene. The CC immunogenic composition is useful for treating cancer, preferably CC prostate cancer in an animal, e.g. human, which involves administering the immunogenic composition that is sufficient to elicit the production CC of cytotoxic T lymphocytes specific for the prostate specific CC polypeptide. The invention is useful for identifying anti-neoplastic CC CC agents. This sequence represents a human prostate specific polypeptide of CC the invention.

SQ Sequence 885 AA;

XX

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          338 RYFGEKVALYFAWLGFYTGWLLPAAVVGTLVFLVGCFLVFSDIPTQELCGSKDSFEMCPL 397
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Qу
          Db
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Qу
       301 YEDTEERPRPQFAASAPMTAPNPITGEDEPYFPERSRARRMLAGSVVIVVMVAVVVMCLV 360
          458 YEDTEERPRPQFAASAPMTAPNPITGEDEPYFPERSRARRMLAGSVVIVVMVAVVVMCLV 517
Db
       361 SIILYRAIMAIVVSRSGNTLLAAWASRIASLTGSVVNLVFILILSKIYVSLAHVLTRWEM 420
Qу
          Db
       518 SIILYRAIMAIVVSRSGNTLLAAWASRIASLTGSVVNLVFILILSKIYVSLAHVLTRWEM 577
```

```
Qу
        421 HRTQTKFEDAFTLKVFIFQFVNFYSSPVYIAFFKGRFVGYPGNYHTLFGVRNEECAAGGC 480
           Db
        578 HRTQTKFEDAFTLKVFIFQFVNFYSSPVYIAFFKGRFVGYPGNYHTLFGVRNEECAAGGC 637
        481 LIELAQELLVIMVGKQVINNMQEVLIPKLKGWWQKFRLRSKKRKAGASAGASQGPWEDDY 540
Qу
           638 LIELAQELLVIMVGKQVINNMQEVLIPKLKGWWQKFRLRSKKRKAGASAGASQGPWEDDY 697
Db
Qу
        541 ELVPCEGLFDEYLEMVLQFGFVTIFVAACPLAPLFALLNNWVEIRLDARKFVCEYRRPVA 600
           698 ELVPCEGLFDEYLEMVLQFGFVTIFVAACPLAPLFALLNNWVEIRLDARKFVCEYRRPVA 757
Db
        601 ERAQDIGIWFHILAGLTHLAVISNAFLLAFSSDFLPRAYYRWTRAHDLRGFLNFTLARAP 660
Qу
           Db
        758 ERAODIGIWFHILAGLTHLAVISNAFLLAFSSDFLPRAYYRWTRAHDLRGFLNFTLARAP 817
        661 SSFAAAHNRTCRYRAFRDDDGHYSQTYWNLLAIRLAFVIVFE 702
Qу
           Db
        818 SSFAAAHNRTCRYRAFRDDDGHYSQTYWNLLAIRLAFVIVFE 859
RESULT 4
AEB13424
ID
    AEB13424 standard; protein; 843 AA.
XX
AC
    AEB13424;
XX
    22-SEP-2005 (first entry)
DT
XX
DE
    Human prostate specific polypeptide #1.
XX
    Screening; diagnosis; drug delivery; prostate specific polypeptide;
ΚW
    cancer; prostate tumor; cytostatic; neoplasm.
KW
XX
OS
    Homo sapiens.
XX
PN
    W02005062788-A2.
XX
PD
    14-JUL-2005.
XX
    16-DEC-2004; 2004WO-US042406.
PF
XX
    22-DEC-2003; 2003US-0531809P.
PR
XX
PA
    (AVAL-) AVALON PHARM INC.
XX
PΙ
    Weigle B, Ebner R;
XX
    WPI: 2005-497793/50.
DR
```

```
N-PSDB; AEB13423.
DR
```

XX

XX

PS XX CC

CC

CC CC

CC

CC

CC

CC

CC

CC

CC

CC

CCCC

CC

CC

CC

CC

CC CC

CC

CC

CC

CC

CC

CC

CC CC

CC

CC

CC

XX SO

Qу

Novel isolated prostate specific polypeptide, useful for treating cancer, PΤ and identifying agent that modulates activity of cancer related gene. PT

Claim 12; SEQ ID NO 3; 59pp; English.

The invention relates to an isolated prostate specific polypeptide comprising one or more immunogenic fragments. The invention also relates to a method of identifying an agent that modulates the activity of a cancer related gene involving contacting a compound with a cell containing a gene under conditions promoting the expression of the gene, detecting a difference in expression of the gene relative to when the compound is not present and identifying an agent that modulates the activity of a cancer related gene, a method of identifying an antineoplastic agent involving contacting a cell exhibiting neoplastic activity with a compound first identified as a cancer related gene modulator using and determining a decrease in neoplastic activity after contacting, when compared to when the contacting does not occur, or administering an agent first identified to an animal exhibiting a cancer condition and detecting a decrease in cancerous condition, a method of determining the cancerous status of a cell involving determining an increase in the level of expression in a cell of a gene where an elevated expression relative to a known non-cancerous cell indicates a cancerous state or potentially cancerous state, an antibody that reacts with a prostate specific polypeptide, an immunoconjugate comprising the antibody and a cytotoxic agent, a method of treating cancer involving contacting a cancerous cell in vivo with an agent having activity against a prostate specific polypeptide and an immunogenic composition the prostate specific polypeptide. The prostate specific polypeptide is useful for identifying an agent that modulates the activity of a cancer related gene. The immunogenic composition is useful for treating cancer, preferably prostate cancer in an animal, e.g. human, which involves administering the immunogenic composition that is sufficient to elicit the production of cytotoxic T lymphocytes specific for the prostate specific polypeptide. The invention is useful for identifying anti-neoplastic agents. This sequence represents a human prostate specific polypeptide of the invention.

Sequence 843 AA;

```
Query Match
                       86.6%;
                              Score 3572; DB 10; Length 843;
Best Local Similarity
                       100.0%; Pred. No. 0;
Matches 671; Conservative 0; Mismatches
                                               0;
                                                   Indels
                                                                         0;
                                                             0;
                                                                 Gaps
         1 QQDVQDGNTTVHYALLSASWAVLCYYAEDLRLKLPLQELPNQASNWSAGLLAWLGIPNVL 60
```

Db 158 QQDVQDGNTTVHYALLSASWAVLCYYAEDLRLKLPLQELPNQASNWSAGLLAWLGIPNVL 217

```
Qу
       61 LEVVPDVPPEYYSCRFRVNKLPRFLGSDNQDTFFTSTKRHQILFEILAKTPYGHEKKNLL 120
          Db
       218 LEVVPDVPPEYYSCRFRVNKLPRFLGSDNODTFFTSTKRHOILFEILAKTPYGHEKKNLL 277
       121 GIHQLLAEGVLSAAFPLHDGPFKTPPEGPQAPRLNQRQVLFQHWARWGKWNKYQPLDHVR 180
Qу
          278 GIHOLLAEGVLSAAFPLHDGPFKTPPEGPOAPRLNOROVLFOHWARWGKWNKYOPLDHVR 337
Db
       181 RYFGEKVALYFAWLGFYTGWLLPAAVVGTLVFLVGCFLVFSDIPTOELCGSKDSFEMCPL 240
Qу
          Db
       338 RYFGEKVALYFAWLGFYTGWLLPAAVVGTLVFLVGCFLVFSDIPTOELCGSKDSFEMCPL 397
       241 CLDCPFWLLSSACALAQAGRLFDHGGTVFFSLFMALWAVLLLEYWKRKSATLAYRWDCSD 300
Qу
          398 CLDCPFWLLSSACALAOAGRLFDHGGTVFFSLFMALWAVLLLEYWKRKSATLAYRWDCSD 457
Db
       301 YEDTEERPRPQFAASAPMTAPNPITGEDEPYFPERSRARRMLAGSVVIVVMVAVVVMCLV 360
Qу
          458 YEDTEERPRPQFAASAPMTAPNPITGEDEPYFPERSRARRMLAGSVVIVVMVAVVVMCLV 517
Db
       361 SIILYRAIMAIVVSRSGNTLLAAWASRIASLTGSVVNLVFILILSKIYVSLAHVLTRWEM 420
Qу
          Db
       518 SIILYRAIMAIVVSRSGNTLLAAWASRIASLTGSVVNLVFILILSKIYVSLAHVLTRWEM 577
       421 HRTQTKFEDAFTLKVFIFQFVNFYSSPVYIAFFKGRFVGYPGNYHTLFGVRNEECAAGGC 480
Qу
          578 HRTQTKFEDAFTLKVFIFQFVNFYSSPVYIAFFKGRFVGYPGNYHTLFGVRNEECAAGGC 637
Db
       481 LIELAQELLVIMVGKQVINNMQEVLIPKLKGWWQKFRLRSKKRKAGASAGASQGPWEDDY 540
Qу
          638 LIELAOELLVIMVGKOVINNMOEVLIPKLKGWWOKFRLRSKKRKAGASAGASOGPWEDDY 697
Db
       541 ELVPCEGLFDEYLEMVLQFGFVTIFVAACPLAPLFALLNNWVEIRLDARKFVCEYRRPVA 600
Qу
          698 ELVPCEGLFDEYLEMVLQFGFVTIFVAACPLAPLFALLNNWVEIRLDARKFVCEYRRPVA 757
Db
       601 ERAODIGIWFHILAGLTHLAVISNAFLLAFSSDFLPRAYYRWTRAHDLRGFLNFTLARAP 660
QУ
          Db
       758 ERAQDIGIWFHILAGLTHLAVISNAFLLAFSSDFLPRAYYRWTRAHDLRGFLNFTLARAP 817
       661 SSFAAAHNRTC 671
Qу
          818 SSFAAAHNRTC 828
Db
```

RESULT 5
ABG15488
TD ABG15488 standard: protein:

ID ABG15488 standard; protein; 898 AA. XX

```
ABG15488;
AC
XX
DT
     18-FEB-2002 (first entry)
XX
     Novel human diagnostic protein #15479.
DE
XX
KW
     Human; chromosome mapping; gene mapping; gene therapy; forensic;
     food supplement; medical imaging; diagnostic; genetic disorder.
KW
XX
OS
     Homo sapiens.
XX
     WO200175067-A2.
PN
XX
PD
     11-OCT-2001.
XX
PF
     30-MAR-2001; 2001WO-US008631.
XX
     31-MAR-2000; 2000US-00540217.
PR
     23-AUG-2000; 2000US-00649167.
PR
XX
PΑ
     (HYSE-) HYSEQ INC.
XX
PΙ
     Drmanac RT, Liu C, Tang YT;
XX
DR
    WPI; 2001-639362/73.
     N-PSDB; AAS79675.
DR
XX
     New isolated polynucleotide and encoded polypeptides, useful in
PΤ
PT
     diagnostics, forensics, gene mapping, identification of mutations
     responsible for genetic disorders or other traits and to assess
PΤ
     biodiversity.
PΤ
XX
PS
     Claim 20; SEQ ID NO 45847; 103pp; English.
XX
CC
     The invention relates to isolated polynucleotide (I) and polypeptide (II)
CC
     sequences. (I) is useful as hybridisation probes, polymerase chain
CC
     reaction (PCR) primers, oligomers, and for chromosome and gene mapping,
CC
     and in recombinant production of (II). The polynucleotides are also used
CC
     in diagnostics as expressed sequence tags for identifying expressed
CC
     genes. (I) is useful in gene therapy techniques to restore normal
CC
     activity of (II) or to treat disease states involving (II). (II) is
CC
     useful for generating antibodies against it, detecting or quantitating a
CC
     polypeptide in tissue, as molecular weight markers and as a food
     supplement. (II) and its binding partners are useful in medical imaging
CC
     of sites expressing (II). (I) and (II) are useful for treating disorders
CC
CC
     involving aberrant protein expression or biological activity. The
CC
     polypeptide and polynucleotide sequences have applications in
     diagnostics, forensics, gene mapping, identification of mutations
CC
CC
     responsible for genetic disorders or other traits to assess biodiversity
```

and to produce other types of data and products dependent on DNA and

amino acid sequences. ABG00010-ABG30377 represent novel human diagnostic

CC

CC

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amino acid sequences of the invention. Note: The sequence data for this
CC
CC
   patent did not appear in the printed specification, but was obtained in
CC
   electronic format directly from WIPO at
   ftp.wipo.int/pub/published_pct_sequences
CC
XX
   Sequence 898 AA;
SQ
 Query Match
                    73.5%;
                          Score 3031.5; DB 4;
                                           Length 898;
 Best Local Similarity
                    91.2%;
                          Pred. No. 6.3e-316;
 Matches
        578; Conservative
                         2;
                            Mismatches
                                      11;
                                          Indels
                                                 43;
                                                     Gaps
                                                           2;
Qу
         1 QQDVQDGNTTVHYALLSASWAVLCYYAEDLRLKLPLQELPNQASNWSAGLLAWLGIPNVL 60
          250 QQDVQDGNTTVHYALLSASWAVLCYYAEDLRLKLPLQDYPTRPPTGRPACCAWLGIPNVL 309
Db
        61 LEVVPDVPPEYYSCRFRVNKLPRFLGSDNQDTFFTSTKRHQILFEILAKTPYGHEKKNLL 120
QУ
          Db
       310 LEVVPDVPPEYYSCRFRVNKLPRFLGSDNQDTFFTSTKRHQILFEILAKTPYGHEKKNLL 369
       121 GIHQLLAEGVLSAAFPLHDGPFKTPPEGPQAPRLNQRQVLFQHWARWGKWNKYQPLDHVR 180
Qу
           Db
       370 GIHQLLAEGVLSAAFPLHDGPFKTPPEGPQAPRLNQRQVLFQHWARWGKWNKYQPLDHVR 429
       181 RYFGEKVALYFAWLGFYTGWLLPAAVVGTLVFLVGCFLVFSDIPTOELCGSKDSFEMCPL 240
Qу
           430 RYFGEKVALYFAWLGFYTGWLLPAAVVGTLVFLVGCFLVFSDIPTOELCGSKDSFEMCPL 489
Db
       241 CLDCPFWLLSSACALAQ----AGRLFDHGGTVFFSLFMALWAVLLLEYWKRKSATLAYRW 296
Qу
           490 CLDCPFWLLSSACALAQVREEAGRLFDHGGTVFFSLFMALWAVLLLEYWKRKSATLAYRW 549
Db
       297 DCSDYEDTEERPRPOFAASAPMTAPNPITGEDEPYFPERSRARRMLAGSVVIVVMVAVVV 356
QУ
          550 DCSDYEDTEERPRPQFAASAPMTAPNPITGEDEPYFPERSRARRMLAGSVVIVVMVAVVV 609
Db
       357 MCLVSIILYRAIMAIVVSRSGNTLLAAWASRIASLTGSVVNLVFILILSKIYVSLAHVLT 416
Qу
          610 MCLVSIILYRAIMAIVVSRSGNTLLAAWASRIASLTGSVVNLVFILILSKIYVSLAHVLT 669
Db
Qу
       417 RWEMHRTQTKFEDAFTLKVFIFQFVNFYSSPVYIAFFKGRFVGYPGNYHTLFGVRNEECA 476
           670 RWEMHRTOTKFEDAFTLKVFIFOFVNFYSSPVYIAFFKGRFVGYPGNYHTLFGVRNEECA 729
Db
       477 AGGCLIELAQELLVIMVGKQVINNMQEVLIPKLKGWWQKFRLRSKKRKAGASAGASQGPW 536
Qу
           Db
       730 AGGCLIELAQELLVIMVGKQVINNMQEVLIPKLKGWWQKFRLRSKKRKAGASAGASQGPW 789
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Qу
         537 EDDYELVPCEGLFDEYLEM-----
             Db
         790 EDDYELVPCEGLFDEYLEMGAGFCPNACPELVPELTEPEKARDQPEARSAGQDSRPEAVL 849
         558 QFGFVTIFVAACPLAPLFALLNNWVEIRLDARKF 591
QУ
             Db
         850 OFGFVTIFVAACPLAPLFALLNNWVEIRLDARKF 883
RESULT 6
ADB64420
ID
    ADB64420 standard; protein; 920 AA.
XX
АC
    ADB64420;
XX
DT
    15-JUN-2007 (revised)
    04-DEC-2003 (first entry)
DT
XX
DE
    Human protein encoded by clone FEBRA20031280.
XX
    Human; pharmaceutical; diagnostic; gene therapy; tissue regeneration;
KW
KW
    cell regeneration; membrane protein; signal transduction-related protein;
    transcription-related protein; osteoporosis; neurological disease;
KW
KW
    cancer; tumour; BOND PC; transmembrane protein 16D;
    transmembrane protein 16D (eight membrane-spanning domains);
KW
    transmembrane protein 16D [Homo sapiens]; TMEM16D; FLJ34221; FLJ34272;
KW
    FLJ35277; MGC130026; unnamed protein product;
KW
    unnamed protein product [Homo sapiens].
KW
XX
OS
    Homo sapiens.
XX
PN
    EP1308459-A2.
XX
PD
    07 - MAY - 2003.
XX
PF
    28-MAR-2002; 2002EP-00007401.
XX
    05-NOV-2001; 2001JP-00379298.
PR
PR
    25-JAN-2002; 2002US-0350978P.
XX
PA
     (HELI-) HELIX RES INST.
PA
     (REAS-) RES ASSOC BIOTECHNOLOGY.
XX
PΙ
    Isoqai T, Suqiyama T, Otsuki T, Wakamatsu A, Sato H, Ishii S;
    Yamamoto J, Isono Y, Hio Y, Otsuka K, Nagai K, Irie R, Tamechika I;
PΙ
    Seki N, Yoshikawa T, Otsuka M, Nagahari K, Masuho Y;
PΙ
XX
DR
    WPI; 2003-450961/43.
    N-PSDB; ADB62450.
DR
```

```
PC:NCBI; qi30520318.
DR
XX
    New polynucleotides and polypeptides, useful for developing a diagnostic
PΤ
    marker or medicines for regulation of their expression and activity, or
PT
PΤ
     as targets of gene therapy.
XX
PS
    Claim 1; Page; 222pp; English.
XX
CC
     The invention discloses a polynucleotide comprising a sequence selected
     from 1970 fully defined nucleotide sequences which encode novel
CC
    polypeptides. Also claimed is a polypeptide encoded by the polynucleotide
CC
    or its partial peptide, an antibody binding to the polypeptide or peptide
CC
    of the polynucleotide, immunologically assaying the polypeptide or
CC
    peptide of the polynucleotide by contacting the polypeptide or peptide
CC
    with the antibody of the encoded protein, and observing the binding
CC
    between the two, a transformant carrying the polynucleotide in an
CC
CC
    expressible manner and an antisense polynucleotide. The oligonucleotide
     is useful as a primer for synthesising the polynucleotide, or as a probe
CC
CC
     for detecting the polynucleotide. The polynucleotides and encoded
CC
    proteins are useful as pharmaceutical agents and many disease-related
CC
    genes may be included in them, for developing a diagnostic marker or
CC
    medicines for regulation of their expression and activity, or as targets
CC
    of gene therapy. The genes are involved in tissue and/or cell
CC
    regeneration. Membrane proteins, signal transduction-related proteins,
    transcription-related proteins, disease-related proteins and genes
CC
    encoding them can be used as indicators for diseases (e.g. osteoporosis,
CC
CC
    neurological diseases, cancer, tumours. The cDNA may be used to regulate
CC
     the activity or expression of the encoded protein to treat diseases. The
CC
     sequence presented is a protein of the invention. Note: Some of the
CC
     sequence data for this patent is not represented in the printed
CC
     specification, but is based on sequence information supplied by the
CC
    European Patent Office.
CC
    Revised record issued on 15-JUN-2007: Enhanced with precomputed
CC
CC
     information from BOND.
XX
SQ
     Sequence 920 AA;
 Query Match
                         36.4%; Score 1502.5; DB 6; Length 920;
  Best Local Similarity 40.4%; Pred. No. 2.5e-151;
 Matches 328; Conservative 145; Mismatches
                                                270;
                                                      Indels
                                                               69;
                                                                    Gaps
                                                                           20;
            8 NTTVHYALLSASWAVLCYYAEDLRLKLPLQE----LPNQASNWS-----AGLLAWLGIP 57
Qу
                     || :
         122 NSDIIFVKLHAPWEVLGRYAEQMNVRMPFRRKIYYLPRRYKFMSRIDKQISRLRRWLPKK 181
Db
          58 NVLL--EVVPDVPP-EYYSCRFRVNKLPRFLGSDNQDTFFTSTKRHQILFEILAKTPYGH 114
Qу
               : | | : | | :
                            : |: |
                                      :: |:
```

Db

182 PMRLDKETLPDLEENDCYTAPFSQQRIHHFI-IHNKETFFNNATRSRIVHHILQRIKY-E 239

Qу	115	EKKNLLGIHQLLAEGVLSAAFPLHDGPFKTPPEGPQAPRLNQRQVLFQHWARWGKWNKYQ	174
Db	240	EGKNKIGLNRLLTNGSYEAAFPLHEGSYRSKNSIRTHGAENHRHLLYECWASWGVWYKYQ	299
Qy	175	PLDHVRRYFGEKVALYFAWLGFYTGWLLPAAVVGTLVFLVGCFLVFSDIPTQELCGSKDS	234
Db	300		359
Qу	235	FEMCPLC-LDCPFWLLSSACALAQAGRLFDHGGTVFFSLFMALWAVLLLEYWKRKSATLA	293
Db	360	: : : : : : : :	418
Qу	294	YRWDCSDYEDTEERPRPQFAAS-APMTAPNPITGEDEPYFPERSRARRMLAGSVVIVVMV	352
Db	419	: : : : : :	478
Qу	353	AVVVMCLVSIILYRAIMAIVVSRSGNTLLA-AWASRIASLTGSVVNLVFILIL	404
Db	479	: : :: : : : :: : : :: CVVIAAVFGIVIYRVVTVSTFAAFKWALIRNNSQVAT-TGTAVCINFCIIMLL	530
Qy	405	SKIYVSLAHVLTRWEMHRTQTKFEDAFTLKVFIFQFVNFYSSPVYIAFFKGRFVGYPGNY	464
Db	531	: : : : : : : :	590
Qy	465	HTLFG-VRNEECAAGGCLIELAQELLVIMVGKQVINNMQEVLIPKLKGWWQKFRLRSKKR	523
Db	591	:: : :	647
Qy	524	KAGASAGASQGPWEDDYELVPCEGLFDEYLEMVLQFGFVTIFVAACPLAPLFALLNNW	581
Db	648	:	707
Qy	582	VEIRLDARKFVCEYRRPVAERAQDIGIWFHILAGLTHLAVISNAFLLAFSSDFLPRAYYR	641
Db	708	: :: : : : : : : :	767
Qу	642	WRAPSSFAAAHNRTCRYRAFR	677
Db	768	: : :: : : : : : : : :	827
Qу	678	DDDGHYSQTYWNLLAIRLAFVIVFEHVVFSVGRLLDLLVPDIPESVEIKVKREYY	732
Db	828	: : :: : : : : : : : : ::: DPPHSLVPYGYTLQFWHVLAARLAFIIVFEHLVFCIKHLISYLIPDLPKDLRDRMRREKY	887
Qу	733	LAKQALAENEVLFGTNGTKDEQPKGSELSSHW 764	
Dh	888	:: : : : :	

```
RESULT 7
ABP58666
     ABP58666 standard; protein; 920 AA.
ID
XX
АC
     ABP58666;
XX
DT
     24-MAR-2003 (first entry)
XX
     Human dihydropyrimidinase related protein 1-101.20.
\mathsf{DE}
XX
     Human; dihydropyrimidinase related protein 1-101.20;
KW
     recombinant production; gene therapy; psychosis; development disorder;
KW
     uracil-related metabolic disorder; thymine-related metabolic disorder;
KW
     pyrimidine metabolic disorder.
KW
XX
OS
     Homo sapiens.
XX
ΡN
     CN1364894-A.
XX
PD
     21-AUG-2002.
XX
PF
     10-JAN-2001; 2001CN-00105195.
XX
PR
     10-JAN-2001; 2001CN-00105195.
XX
     (BIOW-) BIOWINDOW GENE DEV INC SHANGHAI.
PA
XX
PΙ
     Mao Y, Xie Y;
XX
     WPI; 2003-000532/01.
DR
     N-PSDB; ABZ57080.
DR
XX
     New polypeptide-human dihydropyrimidinase relative protein 1-101, 20 and
PT
PT
     polynucleotide for encoding such polypeptide.
XX
PS
     Claim 1; Page 28-30 (Disclosure); 36pp; Chinese.
XX
CC
     The invention relates to human dihydropyrimidinase related protein 1-
     101.20 (ABP58666) and nucleic acids encoding it (ABZ57080). The protein
CC
CC
     has a molecular weight of 101.2 kD. The invention also relates to a
     method for the recombinant production of the protein, an antagonist of
CC
CC
     the protein, and the use of the protein, gene and antagonist in
     therapeutic applications. Dihydropyrimidinase related protein 1-101.20
CC
     can be used in the treatment of a variety of diseases such as psychosis,
CC
     development disorders and uracil- and thymine-related metabolic
CC
CC
     disorders. The present sequence represents human dihydropyrimidinase
CC
     related protein 1-101.20
XX
```

SQ Sequence 920 AA;

```
Ouery Match
                   36.0%; Score 1482.5; DB 6; Length 920;
 Best Local Similarity 40.0%; Pred. No. 3.6e-149;
 Matches 325; Conservative 146; Mismatches 272;
                                                69;
                                                         20;
                                         Indels
                                                    Gaps
         8 NTTVHYALLSASWAVLCYYAEDLRLKLPLQE----LPNQASNWS-----AGLLAWLGIP 57
QУ
          122 NSDIIFVKLHAPWEVLGRYAEOMNVRMPFRRKIYYLPRRYKFMSRIDKOISRFRRWLPKK 181
Db
        58 NVLL--EVVPDVPP-EYYSCRFRVNKLPRFLGSDNQDTFFTSTKRHQILFEILAKTPYGH 114
Qу
           182 PMRLDKETLPDLEENDCYTAPFSQQRIHHFI-IHNKETFFNNATRSRIVHHILQRIKY-E 239
Db
       115 EKKNLLGIHQLLAEGVLSAAFPLHDGPFKTPPEGPQAPRLNQRQVLFQHWARWGKWNKYQ 174
QУ
          | | :|:: || || ||
       240 EGKNKIGLNRLLTNGSYEAAFPLHEGSYRSKNSIRTHGAENHRHLLYECWASWGVWYKYQ 299
Db
       175 PLDHVRRYFGEKVALYFAWLGFYTGWLLPAAVVGTLVFLVGCFLVFSDIPTQELCGSKDS 234
QУ
          300 PLDLVRRYFGEKIGLYFAWLGWYTGMLFPAAFIGLFVFLYGVTTLDHSQVSKEVCQATDI 359
Db
       235 FEMCPLC-LDCPFWLLSSACALAQAGRLFDHGGTVFFSLFMALWAVLLLEYWKRKSATLA 293
Qу
            Db
       360 I-MCPVCDKYCPFMRLSDSCVYAKVTHLFDNGATVFFAVFMAVWATVFLEFWKRRRAVIA 418
       294 YRWDCSDYEDTEERPRPQFAAS-APMTAPNPITGEDEPYFPERSRARRMLAGSVVIVVMV 352
Qу
          419 YDWDLIDWEEEEEEIRPQFEAKYSKKERMNPISGKPEPYQAFTDKCSRLIVSASGIFFMI 478
Db
       353 AVVVMCLVSIILYRAIMAIVVSRSGNTLLA-AWA----SRIASLTGSVV--NLVFILIL 404
Qу
           479 CVVIAAVFGIVIYRVVTV-----STFAAFKWALIRNNSQVAT-TGTAVCINFCIIMLL 530
Db
       405 SKIYVSLAHVLTRWEMHRTOTKFEDAFTLKVFIFOFVNFYSSPVYIAFFKGRFVGYPGNY 464
Qу
          531 NVLYEKVALLLTNLEQPRTESEWENSFTLKMFLFQFVNLNSSTFYIAFFLGRFTGHPGAY 590
Db
       465 HTLFG-VRNEECAAGGCLIELAQELLVIMVGKQVINNMQEVLIPKLKGWWQKFRLRSKKR 523
Qу
               Db
       591 LRLINRWRLEECHPSGCLIDLCMQMGIIMVLKQTWNNFMELGYPLIQNWWTR---RKVRQ 647
       524 KAGASAGASOGPWEDDYELVPCE--GLFDEYLEMVLOFGFVTIFVAACPLAPLFALLNNW 581
Qу
                   648 EHGPERKISFPQWEKDYNLQPMNAYGLYDEYLEMILQFGFTTIFVAAFPLAPLLALLNNI 707
Db
       582 VEIRLDARKFVCEYRRPVAERAQDIGIWFHILAGLTHLAVISNAFLLAFSSDFLPRAYYR 641
Qу
          708 IEIRLDAYKFVTQWRRPLASRAKDIGIGYGILEGIGILSVITNAFVIAITSDFIPRLVYA 767
Db
```

```
642 W-----TRAHDLRGFLNFTLA-----RAPSSFAAAHNRTCRYRAFR 677
Qу
                            : |::| :|:
                                                      | |:
                                                              : |||| :|
         768 YKYGPCAGOGEAGOKCMVGYVNASLSVFRISDFENRSEPESDGSEFSGTPLKYCRYRDYR 827
Db
         678 DDDGH----YSOTYWNLLAIRLAFVIVFEHVVFSVGRLLDLLVPDIPESVEIKVKREYY 732
QУ
                          828 DPPHSLVPYGYTLQFWHVLAARLAFIIVFEHLVFCIKHLISYLIPDLPKDLRDRMRREKY 887
Db
         733 LAKQALAENEVLFGTNGTKDEQPKGSELSSHW 764
Qу
             888 LIOEMMYEAELERLOKERKERKKNGKAHHNEW 919
Db
RESULT 8
ADK52114
ID
    ADK52114 standard; protein; 981 AA.
XX
AC
    ADK52114;
XX
DT
    15-JUN-2007 (revised)
DT
    20-MAY-2004 (first entry)
XX
DE
    Human atopic dermatitis/psoriasis-associated protein #29.
XX
KW
    Human; atopic dermatitis; psoriasis; dermatological; anti-inflammatory;
    antipsoriatic; rash; BOND PC; transmembrane protein 16C;
KW
    chromosome 11 open reading frame 25;
KW
    transmembrane protein 16C [Homo sapiens]; TMEM16C; C11orf25; GENX-3947;
ΚW
    transmembrane protein 16C (eight membrane-spanning domains);
KW
    hypothetical protein; hypothetical protein [Homo sapiens]; GO16020;
KW
    GO16021; GO4185; GO7001.
ΚW
XX
OS
    Homo sapiens.
XX
    WO2004016785-A1.
PN
XX
    26-FEB-2004.
PD
XX
PF
    06-AUG-2003; 2003WO-JP009999.
XX
    06-AUG-2002; 2002JP-00229319.
PR
    14-MAY-2003; 2003JP-00136544.
PR
XX
    (GENO-) GENOX RES INC.
PA
    (UYJU-) UNIV JUNTENDO.
PΑ
XX
PΙ
    Itoh M, Ogawa K, Shinagawa A, Sudo H, Ogawa H, Ra C;
    Mitsuishi K:
PΙ
```

```
XX
DR
    WPI; 2004-214514/20.
    N-PSDB; ADK52028.
DR
    PC:NCBI; gi13899227.
DR
    PC:SWISSPROT; Q9BYT9.
DR
XX
PT
    Detecting atopic dermatitis or psoriasis comprises assaying levels of
    expression of an indicator gene at a rash site and non-rash site of a
PT
PΤ
    person with atopic dermatitis or psoriasis.
XX
ΡS
    Example 2; SEQ ID NO 147; 484pp; Japanese.
XX
CC
    The invention relates to detecting atopic dermatitis or psoriasis
CC
    comprising assaying the levels of expression of an indicator gene at a
    rash site and non-rash site of a person with atopic dermatitis or
CC
    psoriasis, comparing these levels with those of a healthy person, and
CC
CC
    determining that if the levels of indicators are higher or lower, then
    this indicates the disease. Also included are a reagent for detecting
CC
CC
    atopic dermatitis or psoriasis, a kit for screening for treatments, a
CC
    transgenic non human vertebrate animal models for the diseases, an agent
CC
    for inducing the diseases in mice and a DNA chip for assaying for the
CC
    indicator genes. The method is used for treatment, detection and animal
CC
    models for research of atopic dermatitis and psoriasis. The present
CC
    sequence is a protein encoded by an indicator gene of the invention.
CC
CC
    Revised record issued on 15-JUN-2007: Enhanced with precomputed
CC
    information from BOND.
XX
SQ
    Sequence 981 AA;
 Query Match
                        35.6%; Score 1467.5; DB 8; Length 981;
 Best Local Similarity 40.9%; Pred. No. 1.6e-147;
 Matches 313; Conservative 149; Mismatches 245; Indels
                                                            59;
                                                                        21;
          20 WAVLCYYAEDLRLKLPLQ-----ELPNQASNWSAGLLAWLGIPNVLLE--VVPDV 67
Qу
               | | | | | | :::| :
                                       : :
                                               :
                                                     |:
                                                           :: |:
Db
         214 WDTLCKYAERLNIRMPFRKKCYYTDGRSKSMGRMQTYFRRIKDWMAQNPMVLDKSAFPDL 273
         68 -PPEYYSCRFRVNKLPRFLGSDNQDTFFTSTKRHQILFEILAKTPY--GHEKKNLLGIHQ 124
Qу
                        274 EESDCYTGPFSRARIHHFI-INNKDTFFSNATRSRIVYHMLERTKYENGISK---VGIRK 329
Db
         125 LLAEGVLSAAFPLHDGPFKT----PPEGPQAPRLNQRQVLFQHWARWGKWNKYQPLDHVR 180
Qу
                                            330 LINNGSYIAAFPPHEGAYKSSQPIKTHGPQ----NNRHLLYERWARWGMWYKHQPLDLIR 385
Db
         181 RYFGEKVALYFAWLGFYTGWLLPAAVVGTLVFLVGCFLVFSDIPTQELCGSKDSFEMCPL 240
Qу
                                                      :||:| : : | ||||
              386 LYFGEKIGLYFAWLGWYTGMLIPAAIVGLCVFFYGLFTMNNSQVSQEICKATEVF-MCPL 444
Db
```

```
241 C-LDCPFWLLSSACALAQAGRLFDHGGTVFFSLFMALWAVLLLEYWKRKSATLAYRWDCS 299
Qу
             445 CDKNCSLORLNDSCIYAKVTYLFDNGGTVFFAIFMAIWATVFLEFWKRRRSILTYTWDLI 504
Db
       300 DYEDTEERPRPOFAAS-APMTAPNPITGEDEPYFPERSRARRMLAGSVVIVVMVAVVVMC 358
Qу
           505 EWEEEEETLRPQFEAKYYKMEIVNPITGKPEPHQPSSDKVTRLLVSVSGIFFMISLVITA 564
Db
       359 LVSIILYR-AIMAIVVSRSGNTLLAAWASRIASLTGSV-VNLVFILILSKIYVSLAHVLT 416
Qу
             565 VFGVVVYRLVVMEOFASFKWNFIKOYW--OFATSAAAVCINFIIIMLLNLAYEKIAYLLT 622
Db
QУ
       417 RWEMHRTOTKFEDAFTLKVFIFOFVNFYSSPVYIAFFKGRFVGYPGNYHTLFG-VRNEEC 475
            623 NLEYPRTESEWENSFALKMFLFQFVNLNSSIFYIAFFLGRFVGHPGKYNKLFDRWRLEEC 682
Db
       476 AAGGCLIELAQELLVIMVGKQVINNMQEVLIPKLKGWWQKFRLRSKKRKAGASAGASQGP 535
QУ
             Db
       683 HPSGCLIDLCLQMGVIMFLKQIWNNFMELGYPLIQNWWSRHKI----KRGIH-DASIPQ 736
       536 WEDDYELVP--CEGLFDEYLEMVLQFGFVTIFVAACPLAPLFALLNNWVEIRLDARKFVC 593
QУ
           737 WENDWNLOPMNLHGLMDEYLEMVLOFGFTTIFVAAFPLAPLLALLNNIIEIRLDAYKFVT 796
Db
QУ
       594 EYRRPVAERAODIGIWFHILAGLTHLAVISNAFLLAFSSDFLPRAYYRW-----T 643
           797 OWRRPLPARATDIGIWLGILEGIGILAVITNAFVIAITSDYIPRFVYEYKYGPCANHVEP 856
Db
       644 RAHDLRGFLNFTLARAP-SSFAAAHNRTCRYRAFR----DDDGHYSQTYWNLLAIRLAF 697
Qу
            :: ||::|| |||
       857 SENCLKGYVNNSLSFFDLSELGMGKSGYCRYRDYRGPPWSSKPYEFTLQYWHILAARLAF 916
Db
       698 VIVFEHVVFSVGRLLDLLVPDIPESVEIKVKREYYLAKOALAENEV 743
QУ
           :||||:||: : :::|| || :::: : ||:
       917 IIVFEHLVFGIKSFIAYLIPDVPKGLHDRIRREKYLVQEMMYEAEL 962
Db
RESULT 9
AEN06206
   AEN06206 standard; protein; 981 AA.
ID
XX
AC
   AEN06206;
XX
   15-JUN-2007 (revised)
DT
DT
   22-FEB-2007 (first entry)
XX
DE
   Human esophageal cancer-associated protein SEQ ID NO 231.
XX
```

ΚW

diagnostic; metastasis; esophagus tumor; gastrointestinal disease;

```
neoplasm; cytostatic; cancer; AXL; ZBTB11; TNFRSF14; NSUN5; SPEN; LTBP3;
KW
     SYNGR1; SLC13A1; MAP3K12; GLYAT; ZNF659; B4GALT2; POGK; AQP3; CAPG;
KW
     SLIT2; BOND_PC; transmembrane protein 16C;
KW
     chromosome 11 open reading frame 25;
KW
     transmembrane protein 16C [Homo sapiens]; TMEM16C; C11orf25; GENX-3947;
KW
     transmembrane protein 16C (eight membrane-spanning domains);
ΚW
     hypothetical protein; hypothetical protein [Homo sapiens]; GO16020;
KW
     G016021; G04185; G07001.
KW
XX
OS
     Homo sapiens.
XX
PN
     WO2006118308-A1.
XX
     09-NOV-2006.
PD
XX
PF
     02-MAY-2006; 2006WO-JP309177.
XX
PR
     02-MAY-2005; 2005JP-00134530.
PR
     13-SEP-2005; 2005JP-00265645.
     13-SEP-2005; 2005JP-00265678.
PR
XX
PA
     (TORA ) TORAY IND INC.
PA
     (KYOU ) UNIV KYOTO.
XX
PΙ
     Akiyama H,
                 Kozono S, Myomoto A, Nomura O, Nobumasa H,
                                                                 Tanaka Y;
     Tomoda S, Shimada Y, Tsujimoto G;
PΙ
XX
DR
    WPI; 2007-110304/11.
    PC:NCBI; qi13899227.
DR
     PC:SWISSPROT: 09BYT9.
DR
XX
     Composition for determining occurrence/metastasis of esophageal cancer in
PT
     subject, comprises an antibody binding to a polypeptide encoded by a
PT
PT
     polynucleotide having a sequence of genes e.g. AXL, ZBTB11 and TNFRSF14,
     and/or polynucleotides.
PT
XX
PS
     Claim 1; SEQ ID NO 231; 142pp; Japanese.
XX
     This invention describes a novel composition for detecting metastasis of
CC
     esophageal cancer in a test subject. The composition contains a probe
CC
     derived from polynucleotides AXL, ZBTB11, TNFRSF14, NSUN5, SPEN, LTBP3,
CC
     SYNGR1, SLC13A1, MAP3K12, GLYAT, ZNF659, B4GALT2, POGK, AQP3, CAPG,
CC
     SLIT2, their variants or fragments and an antibody. The invention also
CC
     claims: a) a kit for detecting, determining or presuming the occurrence
CC
CC
     or metastasis of esophageal cancer in a test subject; b) a DNA chip for
     detecting, determining or presuming the occurrence or metastasis of
CC
CC
     esophageal cancer and c) a method to detect, determine or presume the
CC
     occurrence or metastasis of esophageal cancer in a test subject by
```

detecting the presence of or amount or expression level of one or more

CC

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CC
    esophagus-cancer related target nucleic acid in a biological sample. The
    method enables the rapid and convenient detection of occurrence or
CC
CC
    metastasis of esophageal cancer in test subject with high sensitivity.
CC
    This sequence represents a protein used in the method of the invention
CC
CC
    Revised record issued on 15-JUN-2007: Enhanced with precomputed
CC
    information from BOND.
XX
SQ
    Sequence 981 AA;
 Query Match
                     35.6%; Score 1467.5; DB 12; Length 981;
 Best Local Similarity 40.9%; Pred. No. 1.6e-147;
 Matches 313; Conservative 149; Mismatches 245; Indels
                                                               21;
         20 WAVLCYYAEDLRLKLPLQ-----ELPNQASNWSAGLLAWLGIPNVLLE--VVPDV 67
Qу
           214 WDTLCKYAERLNIRMPFRKKCYYTDGRSKSMGRMQTYFRRIKDWMAQNPMVLDKSAFPDL 273
Db
        68 -PPEYYSCRFRVNKLPRFLGSDNQDTFFTSTKRHQILFEILAKTPY--GHEKKNLLGIHQ 124
Qу
                      :: |: :|:|||:: | :|:: :| :| |
Db
        274 EESDCYTGPFSRARIHHFI-INNKDTFFSNATRSRIVYHMLERTKYENGISK---VGIRK 329
        125 LLAEGVLSAAFPLHDGPFKT----PPEGPQAPRLNQRQVLFQHWARWGKWNKYQPLDHVR 180
Qу
           |: | || || |: |: |:
                                 330 LINNGSYIAAFPPHEGAYKSSQPIKTHGPQ----NNRHLLYERWARWGMWYKHQPLDLIR 385
Db
        181 RYFGEKVALYFAWLGFYTGWLLPAAVVGTLVFLVGCFLVFSDIPTQELCGSKDSFEMCPL 240
Qу
            386 LYFGEKIGLYFAWLGWYTGMLIPAAIVGLCVFFYGLFTMNNSQVSQEICKATEVF-MCPL 444
Db
        241 C-LDCPFWLLSSACALAQAGRLFDHGGTVFFSLFMALWAVLLLEYWKRKSATLAYRWDCS 299
Qу
                 445 CDKNCSLQRLNDSCIYAKVTYLFDNGGTVFFAIFMAIWATVFLEFWKRRRSILTYTWDLI 504
Db
        300 DYEDTEERPRPQFAAS-APMTAPNPITGEDEPYFPERSRARRMLAGSVVIVVMVAVVVMC 358
Qу
           | |:::|:
        505 EWEEEEETLRPQFEAKYYKMEIVNPITGKPEPHQPSSDKVTRLLVSVSGIFFMISLVITA 564
Db
        359 LVSIILYR-AIMAIVVSRSGNTLLAAWASRIASLTGSV-VNLVFILILSKIYVSLAHVLT 416
Qу
              :::|| :| : | : |::||
        565 VFGVVVYRLVVMEQFASFKWNFIKQYW--QFATSAAAVCINFIIIMLLNLAYEKIAYLLT 622
Db
        417 RWEMHRTOTKFEDAFTLKVFIFOFVNFYSSPVYIAFFKGRFVGYPGNYHTLFG-VRNEEC 475
Qу
             623 NLEYPRTESEWENSFALKMFLFQFVNLNSSIFYIAFFLGRFVGHPGKYNKLFDRWRLEEC 682
Db
Qу
        476 AAGGCLIELAQELLVIMVGKQVINNMQEVLIPKLKGWWQKFRLRSKKRKAGASAGASQGP 535
```

```
Db
         683 HPSGCLIDLCLQMGVIMFLKQIWNNFMELGYPLIQNWWSRHKI----KRGIH-DASIPQ 736
         536 WEDDYELVP--CEGLFDEYLEMVLOFGFVTIFVAACPLAPLFALLNNWVEIRLDARKFVC 593
QУ
             737 WENDWNLOPMNLHGLMDEYLEMVLOFGFTTIFVAAFPLAPLLALLNNIIEIRLDAYKFVT 796
Db
         594 EYRRPVAERAQDIGIWFHILAGLTHLAVISNAFLLAFSSDFLPRAYYRW-----T 643
QУ
             Db
         797 OWRRPLPARATDIGIWLGILEGIGILAVITNAFVIAITSDYIPRFVYEYKYGPCANHVEP 856
Qу
         644 RAHDLRGFLNFTLARAP-SSFAAAHNRTCRYRAFR----DDDGHYSQTYWNLLAIRLAF 697
               : |:|::| :|:
                           : |||| :|
                                                           | | | : : | | | | | | |
Db
         857 SENCLKGYVNNSLSFFDLSELGMGKSGYCRYRDYRGPPWSSKPYEFTLQYWHILAARLAF 916
         698 VIVFEHVVFSVGRLLDLLVPDIPESVEIKVKREYYLAKOALAENEV 743
QУ
                         : |:||:|: :::|| || :: : | |:
             :||||:||:
Db
         917 IIVFEHLVFGIKSFIAYLIPDVPKGLHDRIRREKYLVQEMMYEAEL 962
RESULT 10
AEG11146
ID
    AEG11146 standard; protein; 840 AA.
XX
AC
    AEG11146;
XX
    15-JUN-2007 (revised)
DT
    20-APR-2006 (first entry)
DT
XX
DE
    Human transmembrane protein 16A, SEQ ID NO: 11.
XX
    Genetic marker; diagnostic; prognosis; gastrointestinal tumor;
KW
    cytostatic; neoplasm; tumor marker; transmembrane protein 16A; BOND_PC;
ΚW
    TMEM16A protein; TMEM16A protein [Homo sapiens].
KW
XX
OS
    Homo sapiens.
XX
PΝ
    US2006040292-A1.
XX
PD
    23-FEB-2006.
XX
    08-JUL-2005; 2005US-00177894.
PF
XX
PR
    08-JUL-2004; 2004US-0586676P.
XX
PA
    (WEST/) WEST R B.
    (VRIJ/) VAN DE RIJN M.
PΑ
XX
PΙ
    West RB, Van De Rijn M;
XX
```

```
WPI; 2006-182760/19.
DR
    N-PSDB; AEG11141.
DR
DR
    GENBANK; AAH33036.
    PC:NCBI; qi34192278.
DR
XX
PT
    Classifying tumor as gastrointestinal stromal tumor belonging to PDGFRA
PT
    positive subclass, involves detecting expression or activity of gene
    encoding DOG1 polypeptide in sample.
PT
XX
PS
    Disclosure; SEQ ID NO 11; 177pp; English.
XX
CC
    The present invention relates to three gene markers such as DOG1, KIT and
    platelet derived-growth factor receptor alpha (PDGFRA) that are useful in
CC
CC
    classifying tumors. These gene markers are useful in the classification
    of gastrointestinal stromal tumors (GISTs) and tumors other than GISTs.
CC
CC
    The invention also relates to methods providing diagnostic, prognostic
CC
    and predicative information based on the classifying step. The invention
CC
    is useful for classifying gastrointestinal stromal tumors as belonging to
CC
    a PDGFRA positive subclass, KIT negative or PDGFRA negative subclass. The
CC
    present sequence is human transmembrane protein 16A (DOG1; TMEM16A). The
CC
    DOG1 gene encodes a transmembrane protein of unknown function
CC
    (transmembrane protein 16A). The transmembrane protein 16A is encoded by
CC
    DOG1 gene that is mapped to 11q13.2 on chromosome 11.
CC
CC
    Revised record issued on 15-JUN-2007: Enhanced with precomputed
CC
    information from BOND.
XX
SO
    Sequence 840 AA;
                        35.4%; Score 1461.5; DB 11; Length 840;
 Query Match
 Best Local Similarity 40.1%; Pred. No. 5.6e-147;
 Matches 331; Conservative 149; Mismatches 260; Indels
                                                            85;
                                                                Gaps
                                                                       21;
           5 QDGNTTVH---YALLSASWAVLCYYAEDLRLKLPLQELPNQASNWSAGLLAWLGIPNVLL 61
Qу
                     28 RDEDTKIHGVGFVKIHAPWNVLCREAEFLKLKMPTKKMYH--INETRGLLK--KINSVLQ 83
Db
          62 EVVPDVPPEYYSCR-----FRVNKLPRFLGSDNQDTFFTSTKRHQILFEILAKTP 111
Qу
                                   | || :|:||
          84 KITDPIQPKVAEHRPQTMKRLSYPFSREKQHLFDLSD-KDSFFDSKTRSTIVYEILKRTT 142
Db
Qу
         112 YGHEKKNLLGIHQLLAEGVLSAAFPLHDGPFKTPPEGPQAPRLNQRQVLFQHWARWGKWN 171
                 | |::|:: |||:| :
         143 CTKAKYS-MGITSLLANGVYAAAYPLHDGDY----NGENVEFNDRKLLYEEWARYGVFY 196
Db
         172 KYQPLDHVRRYFGEKVALYFAWLGFYTGWLLPAAVVGTLVFLVGCFLVFSDIPTQELCGS 231
Qу
             Db
         197 KYQPIDLVRKYFGEKIGLYFAWLGVYTQMLIPASIVGIIVFLYGCATMDENIPSMEMCDQ 256
```

```
257 RHNITMCPLCDKTCSYWKMSSACATARASHLFDNPATVFFSVFMALWAATFMEHWKRKOM 316
       291 TLAYRWDCSDYEDTEERPRPQFAA----SAPMTAPNPITGEDEPYFPERSRARRMLAGS 345
       317 RLNYRWDLTGFEEEEDHPRAEYEARVLEKSLKKESRNKET--DKVKLTWRDRFPAYLTNL 374
Qy
       346 VVIVVMVAVVVMCLVSIILYRAIMAIVVSRSGNTLLAAWASRIASLTGSVVNLVFILILS 405
          Db
       375 VSIIFMIAVTFAIVLGVIIYRISMAAALAMNSSPSVRSNIRVTVTATAVIINLVVIILLD 434
       406 KIYVSLAHVLTRWEMHRTQTKFEDAFTLKVFIFQFVNFYSSPVYIAFFKGRFVGYPGNYH 465
Qу
           435 EVYGCIARWLTKIEVPKTEKSFEERLIFKAFLLKFVNSYTPIFYVAFFKGRFVGRPGDYV 494
Db
       466 TLF-GVRNEECAAGGCLIELAQELLVIMVGKQVI-NNMQEVLIPKLKGWWQKFRLRSKKR 523
Qу
           495 YIFRSFRMEECAPGGCLMELCIQLSIIMLGKQLIQNNLFEIGIPKMKKLIRYLKLKQQSP 554
Db
       524 KAGASAGASOGPWEDDYELVPCEGLFDEYLEMVLOFGFVTIFVAACPLAPLFALLNNWVE 583
Qу
                  Db
       555 PDHEECVKRKQRYEVDYNLEPFAGLTPEYMEMIIQFGFVTLFVASFPLAPLFALLNNIIE 614
       584 IRLDARKFVCEYRRPVAERAQDIGIWFHILAGLTHLAVISNAFLLAFSSDFLPRA--YYR 641
Qу
           615 IRLDAKKFVTELRRPVAVRAKDIGIWYNILRGIGKLAVIIDAFVISFTSDFIPRLVYLYM 674
Db
       642 WTRAHDLRGFLNFTLARAPSSF-----AAAHN-----RTCRYRAFRD---DDGH 682
QУ
                              : ||:| || ||
                                            : |||: :|:
       675 YSKNGTMHGFVNHTL----SSFNVSDFONGTAPNDPLDLGYEVOICRYKDYREPPWSENK 730
Db
       683 Y--SQTYWNLLAIRLAFVIVFEHVVFSVGRLLDLLVPDIPESVEIKVKREYYLA----- 734
Qу
          731 YDISKDFWAVLAARLAFVIVFONLVMFMSDFVDWVIPDIPKDISQQIHKEKVLMVELFMR 790
Db
       735 ----KQALAENEVLFGTNGTKDEQP------KGSELSSH 763
QУ
              Db
       791 EEQDKQQLL--ETCMEKERQKDEPPCNHHNTKACPDSLGSPAPSH 833
```

```
RESULT 11
AEG11142
     AEG11142 standard; protein; 960 AA.
ID
XX
    AEG11142;
AC
XX
DT
    15-JUN-2007 (revised)
DT
     20-APR-2006
                  (first entry)
```

```
XX
     Human transmembrane protein 16A, SEQ ID NO: 7.
DE
XX
     Genetic marker; diagnostic; prognosis; gastrointestinal tumor;
KW
     cytostatic; neoplasm; tumor marker; transmembrane protein 16A; BOND PC;
KW
     transmembrane protein 16A;
KW
     transmembrane protein 16A (eight membrane-spanning domains);
ΚW
     oral cancer overexpressed 2; membrane protein;
KW
     tumor amplified and overexpressed sequence 2;
KW
ΚW
     transmembrane protein 16A [Homo sapiens]; TMEM16A; TAOS2; ORAOV2;
KW
     FLJ10261.
XX
OS
     Homo sapiens.
XX
    US2006040292-A1.
PN
XX
PD
     23-FEB-2006.
XX
ΡF
     08-JUL-2005; 2005US-00177894.
XX
     08-JUL-2004; 2004US-0586676P.
PR
XX
PΑ
     (WEST/) WEST R B.
PA
     (VRIJ/) VAN DE RIJN M.
XX
PΙ
     West RB, Van De Rijn M;
XX
DR
    WPI; 2006-182760/19.
    N-PSDB; AEG11136.
DR
    REFSEQ; NP_060513.
DR
     PC:NCBI; qi40354210.
DR
XX
     Classifying tumor as gastrointestinal stromal tumor belonging to PDGFRA
PT
     positive subclass, involves detecting expression or activity of gene
PT
PT
     encoding DOG1 polypeptide in sample.
XX
PS
     Disclosure; SEQ ID NO 7; 177pp; English.
XX
CC
     The present invention relates to three gene markers such as DOG1, KIT and
CC
     platelet derived-growth factor receptor alpha (PDGFRA) that are useful in
     classifying tumors. These gene markers are useful in the classification
CC
CC
     of gastrointestinal stromal tumors (GISTs) and tumors other than GISTs.
CC
     The invention also relates to methods providing diagnostic, prognostic
     and predicative information based on the classifying step. The invention
CC
     is useful for classifying gastrointestinal stromal tumors as belonging to
CC
CC
     a PDGFRA positive subclass, KIT negative or PDGFRA negative subclass. The
     present sequence is human transmembrane protein 16A (DOG1; TMEM16A). The
CC
CC
     DOG1 gene encodes a transmembrane protein of unknown function
CC
     (transmembrane protein 16A). The transmembrane protein 16A is encoded by
```

520 SKKRKAGASAGASQGPWEDDYELVPCEGLFDEYLEMVLQFGFVTIFVAACPLAPLFALLN 579

Db

Qу

```
Db
        671 QQSPPDHEECVKRKQRYEVDYNLEPFAGLTPEYMEMIIQFGFVTLFVASFPLAPLFALLN 730
        580 NWVEIRLDARKFVCEYRRPVAERAQDIGIWFHILAGLTHLAVISNAFLLAFSSDFLPRA- 638
Qу
            731 NIIEIRLDAKKFVTELRRPVAVRAKDIGIWYNILRGIGKLAVIINAFVISFTSDFIPRLV 790
Db
        639 -YYRWTRAHDLRGFLNFTLARAPSSF-----AAAHN-----RTCRYRAFRD--- 678
QУ
              : |||: :|:
Db
        791 YLYMYSKNGTMHGFVNHTL---SSFNVSDFONGTAPNDPLDLGYEVOICRYKDYREPPW 846
        679 DDGHY--SQTYWNLLAIRLAFVIVFEHVVFSVGRLLDLLVPDIPESVEIKVKREYYLA-- 734
Qу
             Db
        847 SENKYDISKDFWAVLAARLAFVIVFQNLVMFMSDFVDWVIPDIPKDISQQIHKEKVLMVE 906
        735 -----KOALAENEVLFGTNGTKDEOP-----KGSELSSH 763
QУ
                                 907 LFMREEQDKQQLL--ETWMEKERQKDEPPCNHHNTKACPDSLGSPAPSH 953
Db
RESULT 12
AFB77190
ID
    AFB77190 standard; protein; 1017 AA.
XX
AC
    AFB77190;
XX
DT
    28-JUN-2007 (first entry)
XX
    Mouse TM-1 (Tmem16a) protein.
DE
XX
    Cell isolation; stem cell; therapeutic; transgenic animal; screening;
KW
    tissue regeneration; genitourinary disease; uropathic;
KW
    intervertebral disk displacement; degeneration; injury; vulnerary;
ΚW
    back pain; transmembrane factor-1; Tmem16a.
KW
XX
    Mus musculus.
OS
XX
PΝ
    WO2007027583-A2.
XX
PD
    08-MAR-2007.
XX
    28-AUG-2006; 2006WO-US033491.
PF
XX
    31-AUG-2005; 2005US-0713400P.
PR
XX
PA
    (UYFL ) UNIV FLORIDA RES FOUND INC.
XX
PΙ
    Harfe BD, Cohn MJ;
XX
    WPI: 2007-412931/39.
DR
```

```
N-PSDB; AFB77189.
DR
XX
    Isolating sonic hedgehog expressing-cells comprises obtaining a non-human
PΤ
    transgenic subject in which a marker gene has been inserted into the
PT
PT
    subject's genome.
XX
PS
    Disclosure; SEQ ID NO 2; 96pp; English.
XX
CC
    The present invention relates to a method of isolating cells in selected
CC
    tissues co-expressing the sonic hedgehog (Shh) gene and a marker gene.
    The method involves obtaining a non-human transgenic subject in which a
CC
CC
    marker gene has been inserted into the subject's genome and isolating
CC
    Shh/marker gene expressing cells and Shh/marker gene non-expressing cells
CC
    from the selected tissue. The invention further provides a method of
CC
    identifying differentially expressed genes (e.g. transmembrane factors TM
CC
    -1 and TM-2, EST 1437418, Mmu-miR-135a-2 and AP-2 beta) in selected
CC
    tissues co-expressing the sonic hedgehog gene and a marker gene. The
CC
    invention is useful in tissue engineering, regeneration, reconstruction
CC
    and/or repair of tissues and genitourinary system and also in treating
CC
    intervertebral disk rupture, degeneration, disease or injury and back
    pain. The invention is further useful for generating transgenic animal.
CC
CC
    The present sequence is the mouse TM-1 (Tmem16a) protein.
XX
SQ
    Sequence 1017 AA;
 Query Match
                        35.2%; Score 1452.5; DB 12; Length 1017;
                        40.0%; Pred. No. 7e-146;
 Best Local Similarity
 Matches 330; Conservative 156; Mismatches 257; Indels
                                                                 Gaps
                                                                        22;
           6 DGNTTVH---YALLSASWAVLCYYAEDLRLKLPLQELPNQASNWSAGLLAWLGIPNVLLE 62
Qу
                     Db
         202 DEDTKIHGVGFVKIHAPWHVLCREAEFLKLKMPTKKVYHISE--TRGLLK--TINSVLQK 257
          63 VVPDVPPEYYSCRFRVNKLPRFLGS-----DNQDTFFTSTKRHQILFEILAKTPYG 113
Qу
                               : |
                                              ::|:|| | | |::||| :|
         258 ITDPIQPKVAEHRPQTTKRLSYPFSREKQHLFDLTDRDSFFDSKTRSTIVYEILKRTTCT 317
Db
         114 HEKKNLLGIHQLLAEGVLSAAFPLHDGPFKTPPEGPQAPRLNQRQVLFQHWARWGKWNKY 173
Qу
               | : : | |
                      | |::|:: || :| : ||
         318 KAKYS-MGITSLLANGVYSAAYPLHDGDY----EGDNV-EFNDRKLLYEEWASYGVFYKY 371
Db
Qу
         174 QPLDHVRRYFGEKVALYFAWLGFYTGWLLPAAVVGTLVFLVGCFLVFSDIPTQELCGSKD 233
             Db
         372 QPIDLVRKYFGEKVGLYFAWLGAYTQMLIPASIVGVIVFLYGCATVDENIPSMEMCDQRY 431
```

Qу

Db

234 SFEMCPLC-LDCPFWLLSSACALAQAGRLFDHGGTVFFSLFMALWAVLLLEYWKRKSATL 292

432 NITMCPLCDKTCSYWKMSSACATARASHLFDNPATVFFSVFMALWAATFMEHWKRKQMRL 491

```
Qу
        293 AYRWDCSDYEDTEE----RPRPQFAA----SAPMTAPNPITGEDEPYFPERSRARRMLA 343
                       Db
        492 NYRWDLTGFEEEEEAVKDHPRAEYEARVLEKSLRKESRNKET--DKVKLTWRDRFPAYFT 549
        344 GSVVIVVMVAVVVMCLVSIILYRAIMAIVVSRSGNTLLAAWASRIASLTGSVVNLVFILI 403
Qу
                      :: :|:|| | :: : : :
             | |: |:||
        550 NLVSIIFMIAVTFAIVLGVIIYRISTAAALAMNSSPSVRSNIRVTVTATAVIINLVVIIL 609
Db
        404 LSKIYVSLAHVLTRWEMHRTQTKFEDAFTLKVFIFQFVNFYSSPVYIAFFKGRFVGYPGN 463
QУ
           Db
        610 LDEVYGCIARWLTKIEVPKTEKSFEERLTFKAFLLKFVNSYTPIFYVAFFKGRFVGRPGD 669
        464 YHTLF-GVRNEECAAGGCLIELAQELLVIMVGKQVI-NNMQEVLIPKLKGWWQKFRLRSK 521
Qу
           Db
        670 YVYIFRSFRMEECAPGGCLMELCIQLSIIMLGKQLIQNNLFEIGIPKMKKFIRYLKLRRQ 729
        522 KRKAGASAGASQGPWEDDYELVPCEGLFDEYLEMVLQFGFVTIFVAACPLAPLFALLNNW 581
Qу
                    Db
        730 SPSDREEYVKRKQRYEVDFNLEPFAGLTPEYMEMIIQFGFVTLFVASFPLAPLFALLNNI 789
        582 VEIRLDARKFVCEYRRPVAERAQDIGIWFHILAGLTHLAVISNAFLLAFSSDFLPRAYYR 641
Qу
           Db
        790 IEIRLDAKKFVTELRRPVAIRAKDIGIWYNILRGVGKLAVIINAFVISFTSDFIPRLVYL 849
        642 WTRAHD--LRGFLNFTLARAPSSF-----AAAHN-----RTCRYRAFRD---DD 680
Qу
              ::::
                                      : |||: :|:
        850 YMYSQNGTMHGFVNHTL----SSFNVSDFQNGTAPNDPLDLGYEVQICRYKDYREPPWSE 905
Db
        681 GHY--SQTYWNLLAIRLAFVIVFEHVVFSVGRLLDLLVPDIPESVEIKVKREYYL---- 733
QУ
             906 HKYDISKDFWAVLAARLAFVIVFONLVMFMSDFVDWVIPDIPKDISOOIHKEKVLMVELF 965
Db
        734 ----AKQALAENEVLFGTNGTKDEQPKGSELSSHWTPFTVPKA 772
Qу
                         : |:|: ::| :| | |:|
        966 MREEQGKQQLLDTWM-----EKEKPRDVPCNNH-SPTTHPEA 1001
Db
RESULT 13
ADG48280
ID
    ADG48280 standard; protein; 1003 AA.
XX
AC
   ADG48280;
XX
DT
    11-MAR-2004 (first entry)
XX
    Human retina-specific protein - C12orf3variants.
DE
XX
ΚW
    human; retina-specific protein; NETO1; retinal disease;
    age related macular degeneration; night blindness; C12orf3variants.
KW
```

```
XX
OS
    Homo sapiens.
XX
    WO2003068967-A2.
PΝ
XX
     21-AUG-2003.
PD
XX
    18-FEB-2003; 2003WO-EP001625.
PF
XX
PR
    18-FEB-2002; 2002EP-00003675.
     21-FEB-2002; 2002US-0357857P.
PR
XX
PΑ
     (LYNK-) LYNKEUS BIO TECH GMBH.
XX
PΙ
    Stoehr BH, Weber FHB, Goehring F;
XX
DR
    WPI; 2003-767334/72.
    N-PSDB; ADG48279.
DR
XX
PΤ
    New nucleic acid encoding retinal protein sNETO1, useful for diagnosis of
    retinal disease, especially macular degeneration, also for drug screening
PΤ
PΤ
    and therapy.
XX
PS
    Claim 18; Fig 14; 199pp; English.
XX
CC
    The invention comprises the amino acid and coding sequences of a human
CC
    retina-specific protein - NETO1. The DNA and protein sequences of the
CC
    invention are useful in the treatment of retinal diseases, such as
CC
    macular degeneration (especially age related) and night blindness. The
CC
    present amino acid sequence represents the human retina-specific protein
CC
    C12orf3variants.
XX
SO
     Sequence 1003 AA;
 Query Match
                         34.9%; Score 1437; DB 7; Length 1003;
 Best Local Similarity 38.7%; Pred. No. 3.2e-144;
 Matches 326; Conservative 161; Mismatches 263; Indels 92;
                                                                   Gaps
                                                                          23:
Qу
           1 QQDVQDGNTTVHYALLSASWAVLCYYAEDLRLKLPLQELPNQ-----ASNWSAGLLAW 53
                                                    :
                        174 EKDLENKSQGSIFVRIHAPWQVLAREAEFLKIKVPTKKEMYEIKAGGSIAKKFSAAL--- 230
Db
          54 LGIPNVLLEVVPDVPPEYYSCRFRVNKLP----RFLGSDNQDTFFTSTKRHQILFEIL 107
Qу
                      : | | | | : : : :
                                        : | | | | : | : | | |
         231 --- QKLSSHLQPRV-PEHSNNKMKNLSYPFSREKMYLYNIQEKDTFFDNATRSRIVHEIL 286
Db
         108 AKTPYGHEKKNLLGIHQLLAEGVLSAAFPLHDGPFKTPPEGPQAPRLNQRQVLFQHWARW 167
Qу
                       | :||: |:| : ||:||| : :| :
                                                          : | |::|:| ||::
Db
         287 KRTACS-RANNTMGINSLIANNIYEAAYPLHDGEYDSPEDD-----MNDRKLLYQEWARY 340
```

```
168 GKWNKYOPLDHVRRYFGEKVALYFAWLGFYTGWLLPAAVVGTLVFLVGCFLVFSDIPTQE 227
Qу
          341 GVFYKFOPIDLIRKYFGEKIGLYFAWLGLYTSFLIPSSVIGVIVFLYGCATIEEDIPSRE 400
Db
       228 LCGSKDSFEMCPLC-LDCPFWLLSSACALAOAGRLFDHGGTVFFSLFMALWAVLLLEYWK 286
Qу
          401 MCDQQNAFTMCPLCDKSCDYWNLSSACGTAQASHLFDNPATVFFSIFMALWATMFLENWK 460
Db
       287 RKSATLAYRWDCSDYEDTEER----PRPOFAA-----SAPMTAPNPIT----G 326
Qу
             Db
       461 RLOMRLGYFWDLTGIEEEEERAOEHSRPEYETKVREKMLKESNOSAVOKLETNTTECGDE 520
Qу
       327 EDEPYFPERSRARRMLAGSVVIVVMVAVVVMCLVSIILYRAIMAIVVSRSGNTLLAAWAS 386
                    521 DDEDKLTWKDRFPGYLMNFASILFMIALTFSIVFGVIVYRITTAAALS-----LNKATRS 575
Db
       387 RI---ASLTGSVVNLVFILILSKIYVSLAHVLTRWEMHRTOTKFEDAFTLKVFIFOFVNF 443
Qу
              576 NVRVTVTATAVIINLVVILILDEIYGAVAKWLTKIEVPKTEQTFEERLILKAFLLKFVNA 635
Db
       444 YSSPVYIAFFKGRFVGYPGNYHTLF-GVRNEECAAGGCLIELAQELLVIMVGKQVI-NNM 501
Qу
              636 YSPIFYVAFFKGRFVGRPGSYVYVFDGYRMEECAPGGCLMELCIQLSIIMLGKQLIQNNI 695
Db
       502 QEVLIPKLKGWWQKFRLRSKKRKAGASAGA-SQGP--WEDDYELVPCEGLFDEYLEMVLQ 558
Qу
           696 FEIGVPKLK---KLFRKLKDETEAGETDSAHSKHPEQWDLDYSLEPYTGLTPEYMEMIIQ 752
Db
       559 FGFVTIFVAACPLAPLFALLNNWVEIRLDARKFVCEYRRPVAERAQDIGIWFHILAGLTH 618
Qу
          753 FGFVTLFVASFPLAPVFALLNNVIEVRLDAKKFVTELRRPDAVRTKDIGIWFDILSGIGK 812
Db
       619 LAVISNAFLLAFSSDFLPRAYYRWTRAHD--LRGFLNFTLA-----RAPSSFAA 665
Qу
           :||||||::| :|||:|| |::: :|: | ||:|| ||:
       813 FSVISNAFVIAITSDFIPRLVYQYSYSHNGTLHGFVNHTLSFFNVSQLKEGTQPENSQFD 872
Db
       666 AHNRTCRYRAFRD----DDGHYSQTYWNLLAIRLAFVIVFEHVVFSVGRLLDLLVPDIP 720
Qу
             : ||:: :|:
                           873 QEVQFCRFKDYREPPWAPNPYEFSKQYWFILSARLAFVIIFQNLVMFLSVLVDWMIPDIP 932
Db
Qу
       721 ESVEIKVKRE-----YYLAKQALAENEVLFGTNGTKDEQPKGSELSSHWTPFTVPKA-S 773
                      933 TDISDQIKKEKSLLVDFFLKE----EHEKLKLMDEPALRSPGGGDRSRSRAASSAPSGQS 988
Db
       774 QL 775
Qу
          Db
       989 QL 990
```

```
RESULT 14
AEH82071
     AEH82071 standard; protein; 913 AA.
ID
XX
AC
     AEH82071;
XX
     15-JUN-2007 (revised)
DT
DT
     13-JUL-2006
                  (first entry)
XX
\mathsf{DE}
     Human qnathodiaphyseal dysplasia protein, GDD1.
XX
     Osteopathic; Gene therapy; bone disease; bone injury; bone resorption;
KW
     qnathodiaphyseal dysplasia; GDD1; BOND_PC; transmembrane protein 16E;
KW
     integral membrane protein GDD1; transmembrane protein 16E [Homo sapiens];
KW
     TMEM16E; GDD1; integral membrane protein GDD1 [Homo sapiens]; GO5783;
KW
     G016020; G016021.
KW
XX
OS
     Homo sapiens.
XX
FΗ
     Key
                     Location/Qualifiers
FT
     Inhibitory-site 356
FT
                     /note= "Missense mutations in the coding sequence can
FT
                     lead to substitution of this residue with either Arg or
                     Glv"
FΤ
XX
     JP2006121961-A.
PN
XX
PD
     18-MAY-2006.
XX
PF
     28-OCT-2004; 2004JP-00313511.
XX
PR
     28-OCT-2004; 2004JP-00313511.
XX
PA
     (UYTO-) UNIV TOKUSHIMA NAT UNIV CORP.
XX
PΙ
     Itakura M,
                 Tsutsumi S, Kamata N, Inoue H;
XX
DR
     WPI; 2006-367194/38.
     N-PSDB; AEH82070.
DR
DR
     PC:NCBI; gi47106048.
     PC:SWISSPROT; Q75V66.
DR
XX
     Novel gnathodiaphseal dysplasia DNA, useful as diagnostic agent for bone
PT
     disease such as gnathodiaphseal dysplasia, bone deficiency or bone-
PΤ
PT
     resorption property disease.
XX
PS
     Claim 9; SEQ ID NO 2; 11pp; Japanese.
XX
```

```
CC
    The present invention relates to a human gnathodiaphyseal dysplasia (GDD)
    coding sequence (GDD1; AEH82070) and encoded protein (AEH82071). GDD1 is
CC
    useful as a bone disease diagnostic agent, where the bone disease is GDD,
CC
CC
    bone deficiency and/or bone-resorption property disease, where the GDD
CC
    disease causes hardening of bone, susceptibility to fracture, cement bone
    pathology of a lower jaw bone, etc. GDD1 is also useful in bone formation
CC
CC
    regeneration, hard tissue reconstruction, etc., and in research
CC
    application.
CC
CC
    Revised record issued on 15-JUN-2007: Enhanced with precomputed
CC
    information from BOND.
XX
SQ
    Sequence 913 AA;
 Query Match
            34.3%; Score 1412.5; DB 11; Length 913;
 Best Local Similarity 39.2%; Pred. No. 1.2e-141;
 Matches 309; Conservative 148; Mismatches 259; Indels
                                                                20;
          1 QQDVQDGNTTVHYALLSASWAVLCYYAEDLRLKLPLQE--LPNQASNWSAGLLAWLGIPN 58
Qу
            ::| :|| | :: : : | | | | | | | :|:::: :|
        120 KRDSEDGRT--YFVKIHAPWEVLVTYAEVLGIKMPIKESDIPRPKHTPISYVLGPVRLP- 176
Db
         59 VLLEVVPDVPPEYYSCRFRVNKLPRFLGSDNQDTFFTSTKRHQILFEILAKTPYGHEK-K 117
Qу
                   177 -LSVKYPH--PEYFTAQFSRHRQELFLIED-QATFFPSSSRNRIVYYILSRCPFGIEDGK 232
Db
        118 NLLGIHQLLAEGVLSAAFPLHDGPFKTPPEGPQAPRLNQRQVLFQHWARWGKWNKYQPLD 177
Qу
              Db
        233 KRFGIERLLNSNTYSSAYPLHDGQYWKPSEPPNP--TNERYTLHQNWARFSYFYKEQPLD 290
        178 HVRRYFGEKVALYFAWLGFYTGWLLPAAVVGTLVFLVGCFLVFSDIPTQELCGSK--DSF 235
Qу
            291 LIKNYYGEKIGIYFVFLGFYTEMLFFAAVVGLACFIYGLLSMEHNTSSTEICDPEIGGQM 350
Db
        236 EMCPLCLD-CPFWLLSSACALAQAGRLFDHGGTVFFSLFMALWAVLLLEYWKRKSATLAY 294
Qу
            Db
        351 IMCPLCDQVCDYWRLNSTCLASKFSHLFDNESTVFFAIFMGIWVTLFLEFWKQRQARLEY 410
Qу
        295 RWDCSDYEDTEE--RPRPQFAASAPMTAPNPITGEDEPYFPERSRARRMLAGSVVIVVMV 352
            411 EWDLVDFEEEQQQLQLRPEFEAMCKHRKLNAVTKEMEPYMPLYTRIPWYFLSGATVTLWM 470
Db
        353 AVVVMCLVSIILYRAIMAIVVSRSGNTLLAAWASRI-----ASLTGS 394
Qу
            ::|| :|:||
                                  :: | :|| :
        471 SLVVTSMVAVIVYRL-----SVFATFASFMESDASLKQVKSFLTPQITTSLTGS 519
Db
        395 VVNLVFILILSKIYVSLAHVLTRWEMHRTQTKFEDAFTLKVFIFQFVNFYSSPVYIAFFK 454
Qу
            520 CLNFIVILILNFFYEKISAWITKMEIPRTYQEYESSLTLKMFLFQFVNFYSSCFYVAFFK 579
Db
```

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455 GRFVGYPGNYHTLFGV-RNEECAAGGCLIELAQELLVIMVGKQVINNMQEVLIPKLKGWW 513
Qу
            580 GKFVGYPGKYTYLFNEWRSEECDPGGCLIELTTQLTIIMTGKQIFGNIKEAIYPLALNWW 639
Db
        514 OKFRLRSKKRKAGASAGASOGPWEDDYELVPCE--GLFDEYLEMVLOFGFVTIFVAACPL 571
QУ
                               || |::|
                                          640 -----RRRKARTNSEKLYSRWEQDHDLESFGPLGLFYEYLETVTQFGFVTLFVASFPL 692
Db
        572 APLFALLNNWVEIRLDARKFVCEYRRPVAERAQDIGIWFHILAGLTHLAVISNAFLLAFS 631
Qу
            693 APLLALINNIVEIRVDAWKLTTOYRRTVASKAHSIGVWODILYGMAVLSVATNAFIVAFT 752
Db
QУ
        632 SDFLPRAYYRW----TRAHDLRGFLN-----FTLARAPSSFAAAHNR---TCRYRAFR-- 677
            || :|| | :
                             : |::|
                                       | :| |: | : |
                                                       753 SDIIPRLVYYYAYSTNATQPMTGYVNNSLSVFLIADFPNHTAPSEKRDFITCRYRDYRYP 812
Db
        678 -DDDGHY--SQTYWNLLAIRLAFVIVFEHVVFSVGRLLDLLVPDIPESVEIKVKREYYLA 734
QУ
                Db
        813 PDDENKYFHNMQFWHVLAAKMTFIIVMEHVVFLVKFLLAWMIPDVPKDVVERIKREKLMT 872
        735 KQALAENEV 743
Qу
             : | : |:
Db
        873 IKILHDFEL 881
RESULT 15
ABB62812
    ABB62812 standard; protein; 1219 AA.
ID
XX
АC
    ABB62812;
XX
    15-JUN-2007 (revised)
DT
DT
    26-MAR-2002 (first entry)
XX
DE
    Drosophila melanogaster polypeptide SEQ ID NO 15228.
XX
    Drosophila; developmental biology; cell signalling; insecticide;
KW
ΚW
    pharmaceutical; BOND_PC; CG6938-PA; CG6938-PA [Drosophila melanogaster];
    CG6938.
KW
XX
OS
    Drosophila melanogaster.
XX
PN
    WO200171042-A2.
XX
    27-SEP-2001.
PD
XX
PF
    23-MAR-2001; 2001WO-US009231.
XX
```

|| :|: :|

:: |||

::

Qу

Db

Qу

Db

46 WSAGLLAWLGIPNVLLEVVPDVPPEYYSCRFRVNKLPRFLGSDNQDTFFTSTKRHQILFE 105

444 WQR-LTKKIQLDQTLLE----GETTFKAATANGNPEEQFIVKD-RATAFTSAQRSLMVMQ 497

106 ILAKTPYGHEKKNLLGIHQLLAEGVLSAAFPLHDGPFKTPPEGPQAPRLN-QRQVLFQHW 164

498 VLIRTPFDESDRS--GIRRLMNDGTYLGCFPLHEGRY----DRPHSSGISLDRRVLYQTW 551

||||:|:

:|: | : | | | : : :

: | : :: |:||:|

: :

Qy	165	ARWGKWNKYQPLDHVRRYFGEKVALYFAWLGFYTGWLLPAAVVGTLVFLVGCFLVFSD	222
Db	552	: : :	611
Qу	223	<pre>IPTQELCGSKDSFEMCPLC-LDCPFWLLSSACALAQAGRLFDHGGTVFFSLFMALWAV :: : : : : : </pre>	279
Db	612	TPSKEICNEYGTGNITLCPLCDKACSYQRLSESCLFSRLTYLFDNPSTVFFAIFMSFWAT	671
Qу	280	LLLEYWKRKSATLAYRWDCSDYEDTEERPRPQFAASAPMTAPNPITGEDEPYFPERSRAR	339
Db	672	TFLELWKRKQSVLVWEWDLHNV-DMDEENRPEFETNATTFRMNPVTREKEPYMSTWNRSI	730
Qy	340	RMLAGSVVIVVMVAVVVMCLVSIILYRAIMAIVVSRSGNTLLAAWASRIASLTGSVVNLV	399
Db	731	RFVITGSAVLFMISVVLSAVLGTILYRITLVSVIYGGGGFFVKEHAKLFTSVTAALINLV	790
Qy	400	FILILSKIYVSLAHVLTRWEMHRTQTKFEDAFTLKVFIFQFVNFYSSPVYIAFFKGRFVG	459
Db	791	VIMILTRIYHRMAIKLTNLENPRTHTEYEDSYTFKIFFFEFMNFYSSLIYIAFFKGRFFD	850
Qy	460	<pre>YPGNYHTLFGVRNEECAAGGCLIELAQELLVIMVGKQVINNMQEVLIPKLKGWWQK :</pre>	515
Db	851	YPGDDQARKSEFFRLKNDICDPAGCLSELCIQLAIIMVGKQCWNNFMEYLFPKFWNWWR-	909
Qy	516	FRLRSKKRKAGASAGASQGPWEDDYELV-PCE-GLFDEYLEMVLQFGFVTIFVAACPLAP : ::	573
Db	910	QRKHKQATKDESHLHMAWEQDYHMQDPGRLALFDEYLEMILQYGFVTLFVAAFPLAP	966
Qy	574	LFALLNNWVEIRLDARKFVCEYRRPVAERAQDIGIWFHILAGLTHLAVISNAFLLAFSSD	633
Db	967	LFALLNNVAEIRLDAYKMVTQARRPLAERVEDIGAWYGILRIITYTAVVSNAFVIAYTSD	1026
Qy	634	FLPRAYYRWTRAHDLRGFLNFTLARAPSSFAAAHNRTCRYRAFRDDDGH	682
Db	1027	FIPRMVYKFVYSETHTLAGYIEHSLSIFNTSDYKEEWGASVSEKDPDTCQYRGYRNGPKD	1086
Qy	683	YSQTYWNLLAIRLAFVIVFEHVVFSVGRLLDLLVPDIPESVEIKVKREYYLAKQA	737
Db	1087	YEPYGLSPHYWHVFAARLAFVVVFEHVVFVITGIMQFIIPDVPSEVKTQMQREQLLAKEA	1146
Qу	738	LAENEVLFGTNGTKDEQPKGSELSS 762 : ::	
Db	1147	KYQHGIKRAQGDSQDIMS 1164	

Search completed: June 24, 2008, 15:22:07

Job time : 273 secs

 $SCORE\ Search\ Results\ Details\ for\ Application\ 10552515\ and\ Search\ Result\ 20080624_135827_us-10-552-515-1_copy_157_933.rag.$